Remarks

Claims 1-20 and 31-48 are pending. Claims 31, 35, and 39 are amended herein. Claims 46, 47, and 48 have been added.

In order to more clearly distinguish the claimed invention from the prior art cited in the Office Action, independent claims 31, 35, and 39 were amended to depend on, and be consistent with, newly added claims 46, 47, and 48. As such, the rejections of claims 1-20 and 31-42 are moot as the rejected claims now depend on claims that recite elements that are not taught, suggested, or motivated by the cited references. However, for the sake of obtaining timely allowance of the pending claims, the remarks below are provided, as are comments regarding the rejection of claims 43-45 which are not affected by the amendments contained herein.

The application is directed to a file management apparatus that is adapted to facilitate reading and modifying segments of continuous video within a file through use of a segment name that comprises the file name containing the segment, and comprises a serial number assigned by the file system to the segment. In order to do so, the file management apparatus has the ability to scan a file containing video data, identify discontinuities in the video data, and assign names to segments separated by the discontinuities.

Newly added claim 46 recites: A file management apparatus for managing files stored therein, comprising: a file storage unit operable to store a file that contains at least two pieces of data, each piece of data being video data or other data, each piece of video data containing a piece of numerical information being a time code; a segment judging unit operable to read a piece of data from the file stored in the file storage unit, make an attempt to extract a piece of numerical information being a time code from the read piece of data, and judge whether the piece of numerical information has been extracted from the read piece of data; and a segment generating unit operable, if the segment judging unit judges that the piece of numerical information has not been extracted from the read piece of data, to generate a segment composed of pieces of video data, each of which contains a piece of numerical information being a time code, that are present in the file until immediately before the read piece of data.

With the structure recited in claim 46, the present invention provides an advantageous effect of locating a video data segment without difficulty from a disc on which video data, to each piece of which a time code is attached, and other data (without time codes) are recorded. This is achieved by the feature of the segment judging unit finding a piece of data that does not contain a time code, and the segment generating unit recognizing the video data immediately before that time codeless as an end of a video data segment.

In contrast, the cited references, taken individually or in combination, do not teach or suggest the claimed segment judging unit and the segment generating unit. There is no teaching or suggestion in the cited references to attempt to extract time codes from data within a file and to use the success or failure of such extraction to determine whether data should be included in a video segment. Moreover, there is no teaching or suggestion to generate a segment composed of pieces of video data positioned immediately before a piece of data judged as not having a time code extracted.

Claims 47 and 48 include recitations similar to those of claim 46, and are patentable over the cited references for the same reason that claim 46 is patentable over the cited references.

As with the prior response, the Applicants respectfully assert that the cited references do not teach, suggest, or motivate all of the recitations of any of the pending claims. The prior response, which is herein incorporated by reference, provided a detailed discussion of a portion of the basis by which Applicants make such an assertion. However, in reviewing the current Office Action, the previous Office Action, and the prior response, it seems as if further prosecution of the current application may benefit from taking a step back rather than once again going through an element by element analysis of the claims, as such element by element analysis seems to be preventing proper consideration of the claims as a whole.

From the Applicant's perspective the current rejections disregard what is actually taught by the references, and do not properly consider the claims as a whole. As claims 43-45 remain unchanged by this amendment, they will be used for illustration.

Appl. No. 09/723,972
Amdt. dated April 7, 2005
Reply to Office action of January 7, 2005

Docket No. NAK1-BN18 (62478-3400)

Claims 43-45 were rejected under 35 U.S.C. 103(a) as being unpatentable over Miike et al. (US 5787414, "Miike"), Hisatomi et al. (US6546192, "Hisatomi"), and Rusterholz et al. (US 4873630, "Rusterholz").

Claim 43 recites: "A file management system having at least one video data file comprising a plurality of pieces of video data, with at least some pieces of the plurality of pieces of video data each comprising a time code wherein: the file management system groups the plurality of pieces of video data into video segments by scanning the file for discontinuities between time codes of pieces of video data; the file management system associates a unique segment name with each video segment within the file such that each segment name can be used to read or replace the associated segment within the file."

The Office Action acknowledges that neither Miike nor Hisatomi teach scanning a file for discontinuities, but asserts that col. 224, lines 63-66 ad col. 265, lines 4-8 of Rusterholz satisfy "by scanning the file for discontinuities...." The Applicants respectfully assert that this is not what is taught or suggested by Rusterholz.

Col. 224, lines 63-66 of Rusterholz recites: "But first let us define a pass. A pass is so called because it is a pass through a Vector File. More specifically, a single scan through a vector register of the Vector File." That portion of Rusterholz is part of a section discussing a single precision floating point divide operation that involves eight different passes. When performing the operation, it takes four passes across the Vector file to access an entire vector, because each vector is actually stored physically in four rows in the Vector File. As such, the cited portion of Rusterholz teaches reading a vector stored in four segments by reading four rows from the Vector File. It does not teach scanning of a file for discontinuities, and, more particularly, does not show grouping a plurality of pieces of video data into video segments by scanning the file for discontinuities between time codes of pieces of video data. Scanning alone is insufficient to satisfy the claim, as would be scanning for discontinuities. Grouping by scanning for discontinuities is what is claimed.

Col. 265, lines 4-8 of Rusterholz recites: "Since the primary Vector File has the exact same data as a secondary Vector File, we can send more data at a time and because of the way that the data

Appl. No. 09/723,972
Amdt. dated April 7, 2005
Reply to Office action of January 7, 2005

Docket No. NAK1-BN18 (62478-3400)

is transferred you can send discontinuous data, which is the way that it is sent across." This citation teaches transmission of discontinuous data, but does not teach scanning a file for discontinuities. Moreover, the manner of transmission of data which allows discontinuous data to be sent, prevents any need to scan the transmitted data for discontinuities. Furthermore, even if there were a teaching, suggestion, or motivation to scan for discontinuities, the recitations of claim 43 would not be satisfied as the claim recites grouping by scanning for discontinuities, not simply scanning for discontinuities.

The Office Action does not rely on any teaching or suggestion by the cited references as a basis for justifying the combination of references. Instead, it asserts that the there is a reason to combine the references with the reason being the ability to detect whether a sequence of video segments in time order has been scrambled by transmission between systems. However, it does this without any reference showing transmission of video data between systems, transmission of video data in a manner that causes it to become scrambled, and without any showing as to why, if such fictitious video data were stored in file in scrambled manner, there would be a need to unscramble it. Moreover, the claim recites grouping by scanning, and assigning segment names to the groups thus formed. Wanting to unscramble a scrambled transmission does not provide a motivation for assigning a separate segment name based on detected discontinuities, or a reason why one would want to reference segments, that are the result of a scrambled transmission, by an assigned segment name after unscrambling. As such, there is no reason to combine the reference to form a file management system that: (a) groups a plurality of pieces of video data into video segments by scanning a file already stored on the file system for discontinuities between time codes of pieces of video data, and then (b) associates a unique segment name with each video segment within the file such that each segment name can be used to read or replace the associated segment within the file.

Claim 44 recites in part: "each segment name comprises the file name of the video data file and a serial number unique to that segment within the data file." In rejecting this claim, the Office Action points to Miike for satisfying "and each segment name comprises the file name of the video data file" and Hisatomi as satisfying "and a serial number". However, the Office Action provides no teaching, suggestion, or motivation to utilize the serial number of Hisatomi in

Appl. No. 09/723,972
Amdt. dated April 7, 2005
Reply to Office action of January 7, 2005

Docket No. NAK1-BN18 (62478-3400)

combination with the file name of Miike as a segment name, or any reason to utilize such segments names to reference segments formed by scrambling during transmission. Moreover, the "serial number" of Hisatomi is a manufacturers serial number. As such it would not be unique to a segment with a data file as recited by the claim.

Claim 45 recites in part: "the file management system provides read and write access to an individual video segment within the video data file via the associated segment name." If segments are formed as a result of scrambling, and time codes assigned to facilitate reordering, there is no need to provide read and write access to individual video segments, or to provide such access via a segment name that is a composite of a file name and unique identifier.

It is believed that the case is now in condition for allowance, and an early notification of the same is requested. If the Examiner believes that a telephone interview will help further the prosecution of this case, he is respectfully requested to contact the undersigned attorney at the listed telephone number.

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on April 7, 2005.
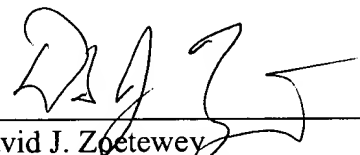
By: _____ Rachel Carter _____

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Signature

Dated: April 7, 2005

Very truly yours,

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